



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

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SEP 27 2006

4-APT-APB

Robert Rogers, Technical Manager
Pollution Control Section
Memphis-Shelby County Health Dept
814 Jefferson Avenue, Suite 437
Memphis, TN 38105

Dear Mr. Rogers:

This correspondence is being sent to provide you with an official final copy of the U. S. Environmental Protection Agency (EPA) Region 4 report, which was completed as a result of the EPA title V and New Source Review (NSR) program evaluation conducted the week of May 23-25, 2006, in Memphis, Tennessee (see Enclosure). The purpose of this program review was to evaluate the status and the ability of the Memphis and Shelby County Health Department Pollution Control Section (the Department) to carry out the duties and responsibilities required to effectively run the title V and NSR programs, as well as find out how EPA can best assist the Department in meeting these commitments.

We would like to take this opportunity to commend the Department staff for the effective implementation of both the title V and NSR programs. EPA Region 4 looks forward to continuing to work closely with the Department to maintain high quality title V and NSR programs.

If you or your staff have any questions regarding this report, please contact Randy Terry of the EPA Region 4 staff at (404) 562-9032.

Sincerely,

G. Alan Farmer
Acting Director
Air, Pesticides and Toxics
Management Division

Enclosure



Memphis/Shelby County Title V and New Source Review Program Review

The U. S. Environmental Protection Agency (EPA) Region 4 committed to conduct detailed title V and New Source Review (NSR) program reviews for all state and local programs that have at least 10 title V major sources within their jurisdiction. These evaluations also include a review of the title V fees collected and billed annually. This commitment results from an agreement between the EPA Office of Air and Radiation and the EPA Office of Inspector General, which required EPA to conduct title V program evaluations of all state and local programs with at least 10 title V sources. EPA Region 4 decided, in addition to title V, to use this opportunity, when applicable, to evaluate the NSR programs at each of the state and local programs. The program reviews are to be completed by the end of Fiscal Year 2006. The Memphis and Shelby County Health Department Pollution Control Section (the Department) program review was conducted the week of May 23-25, 2006, in Memphis, Tennessee. Upon EPA's arrival at the Department, EPA spent the first day reviewing the title V files and discussing the title V questionnaire with the Department staff. The following day was allocated to completing the review of the permit files and conducting the NSR questionnaire. The following parties attended the title V questionnaire discussion: Randy Terry (EPA Region 4), Brandi Jenkins (EPA Region 4), Katy Forney (EPA Region 4) Bill Smith (the Department), and Jim Holt (the Department).

Memphis/Shelby County Title V Program Review

1. Program Review

The Department's organizational structure for air permitting resides at the office in Memphis, Tennessee. All title V permits for the Memphis/Shelby County area are processed in the Memphis office. Separate program evaluation reports will be written covering the Tennessee Department of Environment and Conservation (TDEC), Chattanooga-Hamilton County, Knox County and Nashville-Davidson County title V programs.

The headings in the title V portion of this report duplicate the headings in the title V program review questionnaire administered during the visit.

EPA appreciates the Department's efforts to aid the evaluation process by providing an answered copy of the program review questionnaire prior to the meeting. For many questionnaire items, the answers provided by the Department are more detailed than indicated in the summary discussion below. The answered questionnaire from the Department will be on file at EPA Region 4 for reference.

A. Title V Permit Preparation and Content

The Department has four applications remaining to be processed from the Department's pool of initial title V applications. Of the applications submitted by the sources during the initial round of title V permit issuance, 50 percent lacked sufficient information to create the title V permit. The Department began compliance assistance and outreach efforts, including application preparation training, to improve the quality of the applications being submitted. The Department conducted over 100 meetings, including meetings with three different electrical contractor groups about emergency generators, and a fully attended training course for dry cleaners on how to properly fill out the title V applications. Additionally, the Department translated the maximum achievable control technology (MACT) drycleaning rule into Korean in order to assist the local industry in understanding the requirements of the new MACT rule. Other outreach efforts by the Department include working with Dupont to correct the calculations submitted in their application. This work was so comprehensive it has led Dupont to revise its "how to" manual regarding the method used to do calculations.

On those occasions in which a significant amount of time passes between the application submittal and drafting the permit, the Department requires the sources to update their application and submit a new compliance certification. Also, the Department conducts annual inspections, reviews on-site documents and reviews all the documents submitted by the source in an effort to verify if a source is in compliance prior to issuance of a title V permit. In cases where the facility is out of compliance, the Department incorporates consent agreements into the permit to bring

the source into compliance. Consent agreements range in length from six months to eighteen months. On occasion, the Department has issued consent orders with a compliance schedule and delayed permit issuance until the requirements were met.

Since the implementation of the title V program, the Department has improved in their permit writing by refining their boilerplate language and using as much standardized language as possible. Additionally, the Department has implemented peer-to-peer training and when available, attended outside training sponsored by EPA or other agencies. In order to quality assure the title V permits prior to issuance, each new draft permit undergoes a series of reviews from the permit writer to the supervisor to the title V source and finally the technical manager. Additionally, a technical specialist is assigned a list of items to verify within the permit prior to public notice.

The Department has made specific efforts to streamline their permit issuance by standardizing the format for Federal, State and Local code requirements. Additionally, the Department has continually worked to improve the language within the permits so that the permits are as clear and concise as possible.

The Department permit writers are required to prepare a Permit Application Evaluation or statement of basis (SB) for each title V permit processed, incorporating the requirements of 40 CFR part 70.7(a)(5). The purpose of the SB is to address all applicable requirements, any streamlining contained within the permit, identification of any deviations in monitoring requirements and the rationale behind these deviations. The Department permit writers attend the EPA training and other sources of training to ensure that they prepare adequate SBs.

The Department has experienced delays in permit issuance as a result of waiting for the global settlement on refineries (Global Settlement) prior to issuance of the Premcor permit. Additional sources of delay for permit issuance include competing priorities and delays resulting from consultation with EPA on interpretations of underlying applicable requirements.

Regarding the overall strengths and weakness of the format of title V permits, the Department believes a strength of the format is the promotion of consistency and user readability. However, this format can result in permit writers relying on a "canned" approach when a more innovative approach is necessary to resolve issues.

B. General Permits

The Department does not issue general permits, however, the Department is having internal discussions on the possibility of issuing general permits to gas stations.

C. Monitoring

In order to ensure that its operating permits contain adequate monitoring, the Department reviews each permit and evaluates them on a case-by-case basis to ensure practical enforceability.

Adequate monitoring requirements are based on the permit writers' knowledge of the process operations, along with engineering and regulation knowledge, past experiences from similar sources, and general knowledge. The Supervisor and Technical Manager review all permits to ensure that adequate monitoring is included. To ensure that they are capable of making such determinations and are aware of the latest updates in monitoring, Department permit writers have attended training courses offered by EPA and other agencies as well as peer-to-peer training.

D. Public Participation and Affected State Review

The Department utilizes the "Memphis Daily News," to give general public notice of title V permitting actions. The cost of publishing public notices in the newspaper can be as much as \$150 and is paid for by the source. In addition to meeting the publication requirements in the Daily News, the Department sends electronic copies of all notices to each elected rule-making body in Shelby County, all local Air Board members and any interested citizens that requests a copy of such notices. Persons interested in being placed on the mailing list must make a written request and pay an annual fee of \$10.00 to receive hard copies of the public notice, however, there is no charge for persons on the mailing list to receive electronic copies of the public notice.

Other methods the Department uses for public notification include the Departments website, fax and telephone calls. The Department believes that the methods currently in use are adequate to keep the local citizens updated on impending title V actions. Department policy is to hold a public hearing for every title V permit. The Department publishes the date of the public hearing within the public notice. EPA suggests that language be included within the public notice to refer to the EPA website for additional information on the end of the citizens petition period. The Department does not issue a public notice in any language other than English.

Upon request, copies of any additional information relative to the permit action are provided at a minimum charge of 50 cents per page. However, the Technical Manager has the ability to waive charges and deals with such instances on a case-by-case basis. All title V documents are available for inspection by the public at the Department offices, daily, between the hours of 8:00 am and 4:30 pm. Information available for public access includes any permit, application, SB, compliance report or compliance certification.

Every request to extend the comment period deadline is evaluated on a case-by-case basis by the Department. Over the years, the Department has not noticed an increase in the percent of permits that receive public comments. In fact as the title V program has developed, the sources that receive comments from the public have actually decreased. The Department noted that they do have community groups from the Mallory area, Woodstock area and the Douglas-Crompton area that comment on permits. The Department works closely with the sources prior to public notice to minimize the potential for permittee comments. On the occasions that the Department receives comments from a source, they are typically minor in nature.

The Department notifies all affected states of draft permits by letter. The States of Tennessee, Mississippi and Arkansas qualify as "affected." The Department has never received comments

from another neither affected state, nor have they ever provided comments to another program as an affected state.

E. Permit Issuance/ Revision/ Renewal

The Department has four permits remaining to be issued from its universe of initial title V applications, including Premcor, which is delayed until the Global Settlement for refineries is reached. EPA has requested that the Department submit a timeline detailing when these final four permits will be issued. The Department has been able to process title V revisions within the time frames allotted by Part 70. Efforts by the Department to streamline the processing of title V revisions include the establishment of a tracking system that is updated every two weeks to follow the revisions as they move through the permitting process.

At the time of the program review, the Department had issued five renewal permits and had fifteen applications in-house ready to be processed. The Department has been working to reduce their processing time for renewals, but with the incorporation of minor NSR permit revisions along with new requirements such as MACT rules, has not found renewals to be any easier than initial issuance. The Department does plan to issue all of their renewals within the allocated part 70 timeframe. The Department does not require sources to submit a full application for renewals, if the source has not had any changes since the initial permit issuance. In such cases, the sources may submit a one page application and must certify compliance with the initial application. In instances in which a source has had significant modifications since the initial permit issuance, a full application must be submitted.

F. Compliance

The Department requires that owner/operators shall promptly report deviations from the applicable emission standards attributable to startup, shutdown, or malfunction or emergency conditions as defined in the permit and/or Shelby County Air Code Section 3-9, Reference 1200-3-20. Any malfunction with sufficient duration to cause damage to property or public health must also be reported. The Shelby County Air Code defines prompt reporting to be within 24 hours. Scenarios that do not require prompt reporting include violations of the visible emission standards which occur less than 20 minutes per day, and attainment and unclassified areas if emissions other than from sources designated as significantly impacting on a nonattainment area in excess of the standards will not and do not occur over more than a 24-hour period and no damage to property and or public health is anticipated. The Department requires any deviation that is an immediate threat to health to be reported promptly via telephone with a follow-up written report submitted with the quarterly report or the semi-annual report. Deviations are not necessarily considered as violations. The Department reviews 100 percent of all deviation reports, semi-annual monitoring reports, and annual compliance certifications. Each deviation report must contain the probable cause of the deviation, corrective actions taken, and the magnitude and duration of the deviation. Following the receipt of a deviation report, the permitter reviews the report and evaluates a course of action on a case-by-case basis. If there is a

violation that rises to an enforcement level, a recommendation is given to the Supervisor or Manager to support or reject. If enforcement is not recommended the permitter must write a letter documenting this decision.

G. Resources and Internal Management Support

The Department establishes its title V fee based on emissions weight. Currently the Department's title V fees are \$30.63 per ton minus a 10 percent discount for maintaining a 35 percent surplus (\$27.57 per ton) but is expected to increase to \$31.67 per ton (28.50 discounted) for the FY 07 year upon approval by the County Commission. Additionally, the Department charges a title V permit fee of \$1000 annually or upon issuance of a new title V permit and a minimum emissions fee of \$1000, which must be approved by the County Commission and by the other municipalities prior to implementation. As of the date of this report, this increase in fees has not yet been approved. Title V revenue are processed and tracked within an account separate exclusively for title V. This system allows for financial reports for management oversight and accurately accounts for title V revenue as well as expenditures.

The Department has seven permit writer positions dedicated to title V and Synthetic Minor permitting and inspection. Each engineer is assigned all duties concerning title V and synthetic minor sources. It is anticipated that 15 percent of their time is spent on non-title V activities such as other training programs, enforcement activities or permitting activities such as non-major permitting or PSD/NSR review. The Department ratio of title V permits to permit writer is 5.6 to one.

At the time of the program review, the Department had two vacant engineer positions and one vacant clerical position. Department turnover has fluctuated over the years, but has been stable in recent years. Prior to 2002, the Department experienced significant turnover, leaving only two permit engineers on staff. In 2002, the Department was able to bring the engineering staff level up to a total of seven engineers by increasing the engineer salaries to be more competitive, and since then, engineering staff levels have remained fairly consistent. The Department does not have a career ladder for engineers, but they do have a limited ability to hire above the lowest level of their engineer pay band. Department management receives status reports to keep abreast of the status of title V permit issuance.

Department permit writers are afforded opportunities for EPA and internal training, but the Department has not developed a written training plan. The training provided included how to develop periodic and sufficiency monitoring in permits, enforceable permit terms and conditions as a practical matter and writing a SB. The Department has requested the EPA continue to provide training at more frequent intervals.

The Department does not have an EJ strategic plan or an in-house coordinator charged with oversight of EJ related activities, but the Department has provided some basic level training for

their permit writers. Department permit writers have access readily available to demographic information from EPA when reviewing for potential EJ assessments.

H. Title V Benefits

The Department believes that significant benefits have been gained as a result of the title V program. The Department believes that since they began to implement the title V program, the sources within Memphis/Shelby County have gained better awareness of their compliance obligations. Also, title V has resulted in a clarity and enforceability of NSR permit terms and better documentation of the basis for applicable requirements. Other benefits of the title V program and the title V fee revenue include better training, a stable funding source despite fluctuations in other state programs and more awareness to the community and to elected officials. In some cases, industry has had economic benefits from the title V program.

Program Highlights

1. The amount of outreach that the Department provided during the development of the initial title V permits was extremely impressive and showed a commitment to not only process quality title V permits but to educate the sources on the proper way to prepare a title V application. Providing significant outreach resulted in substantial improvements in the subsequent applications received and less employee time spent contacting the sources for additional information to issue the permit.
2. Another area of note has been the Department's ability to process their permit revisions well within the part 70 timeframes. The Department's commitment to meet these part 70 timeframes allows the sources additional time to work on other aspects of their title V program as well as working on their PSD and NSR programs.
3. EPA wants to commend the Department staff on their overall understanding of their regulations and title V. During the program evaluation EPA was impressed with the understanding that the Department staff had regarding the proper way to implement their regulations. Additionally, the fact that it appears that the Department staff was appropriately implementing the City of Memphis Code 16-87 Malfunctions, Startup and Shutdown (de minimis) rule was greatly appreciated.
4. The Department does an excellent job in preparing its SB (permit application evaluation (PAE)). The department's PAE adequately describes the rationale for the monitoring, the applicability and any exemptions allowed within the permit.

Suggested Improvements

1. The Department has four title V permits remaining to be issued from their group of initial title V applications. While EPA is aware of the circumstances surrounding the delay in issuance of the permits, we would stress that the issuance of these permits needs to be priority. To that extent, EPA is requesting that the Department continue to update EPA monthly on the progress of these submittals, with the exception of Premcor. EPA understands that the progress towards approval of Premcor is dependant upon the approval of the Global Settlement. Upon approval of the Global Settlement, EPA will expect to begin to receive monthly updates on Premcor, as well as any other initial applications that have not completed the permit issuance process.
2. The Department needs to revise its public notice to include appropriate language regarding the end of the public comment period and the 60-day citizen petition deadline. EPA recommends referring to the Region 4 website that lists the deadlines for EPA's 45-day review period, as well as the 60-day petition deadline.
3. The Department has clarified that they have developed a local Guide for Permit Writers and maintain a Standard Operating Procedure (SOP) manual for administrative functions. EPA requests a copy of both the Guide and the SOP for review.

2. Permit Reviews

EPA-Region 4 staff conducted an administrative review of 10 title V files and a performed a content review of two title V permits. The files that were reviewed represented a cross-section of the types of industries permitted by Memphis-Shelby County. Due to the extensive history of the sources, the filing system was not in chronological order and not consistently maintained. For example, some of the files did not contain all the information necessary for a comprehensive public file (i.e. public notice, draft and proposed permits, EPA comments). A number of the permits received comments from EPA via electronic transmission; however the files did not contain these comments. EPA recommends the permit engineer include the comments in the permit file so the file will be complete.

Areas of concern include 1) local only requirements that are cited in the title V permits which are federally enforceable and 2) permit conditions that lack applicable requirement citations. EPA understands that the majority of the requirements originated in the construction permits as local only requirements; however, multiple permits designate several of the applicable requirements as "*locally enforceable limits*." If the limits, however, are approved into the State Implementation Plan, then they should be designated as "*federally enforceable*." Since the program evaluation, the Department has clarified that the local enforceable limits are not federally enforceable, but rather distinct requirements that although included within the title V permit are specified as local

only. The practice is allowed by the Rules and Regulations of the State of Tennessee and adopted locally in the City of Memphis Code Chapter 16-77 and Shelby County Code 3-5.

Suggested Improvements

1. EPA recommends creating a public file that specifically contains information that pertains to the permit for easy accessibility upon request by the public. Additionally, EPA recommends the Department maintain a sign-in sheet, with a notation indicating if comments were received, from each public hearing as proof of the hearing.
2. During the review, the Department expressed concern for the amount of file space that is being used to store the files. EPA recommends the Department begin transferring files to an electronic format such as PDF to help reduce the demand on file space.
3. EPA would like the Department to provide citations for each permit condition, as required by Part 70.

Memphis and Shelby County New Source Review (NSR) Program Review

EPA's Region 4 conducted a review of the NSR permit program administered by the Department. The NSR program review consisted of administering a questionnaire developed for EPA's national NSR program review project. Since the Department issues very few major NSR permits and since Region 4 has reviewed all of the major NSR permits processed by the Department in recent years, no major NSR permits were evaluated as part of the on-site review.

The primary EPA staff person conducting the review was Katy Forney from Region 4's Air Permits Section. The Department's primary participants were Bill Smith and David Thorpe.

Shelby County is designated as a nonattainment area for the 8-hour ozone national ambient air quality standard. Although, the County has not received a nonattainment permit application to date, the program review questionnaire items pertaining to major NSR nonattainment were discussed. The Department agreed to contact Region 4 in the event a major source applies for a nonattainment construction permit.

The Department's organizational structure for air permitting consists of the central office staff in Memphis. All major and minor NSR permits are processed in the Memphis office. The Department's permitting jurisdiction covers all of Shelby County. The Department operates under a certificate of exemption from the Tennessee Department of Environmental Conservation (TDEC) and has a Local Implementation Plan (LIP) approved as part of TDEC's State Implementation Plan (SIP).

Currently, the Department is drafting revisions to their regulations to incorporate EPA's

December 2002 NSR rule revisions. Consequently, the NSR program review discussed in this report covered only the Department's administration of NSR rules prior to the 2002 NSR rule revisions. Once the Department has adopted their version of the NSR rule revisions, future discussions between the Department and EPA Region 4 should prove beneficial to facilitate implementation.

As an appreciated aid to EPA, the Department provided a copy of the program review questionnaire annotated with the Department's answers prior to the on-site review. For many questionnaire items, the answers provided by the Department are more detailed than indicated in the summary discussion below. The annotated questionnaire from the Department will be on file at EPA Region 4 for reference.

The headings in the following report duplicate the headings in the NSR program review questionnaire administered during the visit.

Overview of New Source Review (NSR) Permitting Program

A. NSR Permits

The Department has issued three major NSR permits in the last six years. These permits are tracked in an electronic database along with all other permitting actions. The electronic database also tracks emissions data for each source, including the sources' actual emissions, allowable emissions, and potential-to-emit.

In 2005, the Department issued no Prevention of Significant Deterioration (PSD) permits and it was unclear how many minor or synthetic minor NSR permits were issued. This issue will be discussed later in the report. From the time that a permit application is deemed complete, the average period for permit issuance is about six months for PSD permit issuance (based on the Department's limited experience with PSD permits) and three months for minor NSR permits. The Department remarked that most delays in permit issuance are due to the process of obtaining a complete application.

The Department's permits contain all the necessary elements to establish effective and practically enforceable permit conditions. The permitting staff uses a template as the basis for their permits, which helps establish specific, clear, concise, and enforceable permit conditions. While the Department's permits seem to contain the necessary conditions for a source to avoid an otherwise applicable requirement, identification of these conditions is inconsistent and will be discussed later in this report.

B. Staff and Training

All of the Department's staff members have NSR permitting responsibilities. All new permitting staff attend NSR training and all staff attend other workshops as resources allow. The Department expressed interest in receiving additional NSR permitting training from EPA with an emphasis on the new NSR Reform rules, permit writing techniques, and air quality modeling. EPA discussed the importance of the Department's staff maintaining a working knowledge of the latest air quality model being required by EPA (*i.e.*, AERMOD).

C. NSR Implementation

The Department follows EPA's NSR program guidance and policy as direction for implementing NSR procedures. It is the responsibility of the Department's technical manager to monitor EPA's websites for NSR updates and pass these on to the Department's permitting staff.

D. Public Participation

The Department issues a public notice for all modification and construction applications. Additionally, the Department notices major PSD, synthetic minor and minor draft permits. The

Department publishes all public notices on their website, in a newspaper of general circulation (Memphis Daily News), and all notices are sent to a mailing list. The Department holds public hearings for all PSD and major nonattainment NSR permits.

E. Program Benefits

The Department believes that the NSR program provides an incentive for sources to reduce emissions below major source levels and helps sustain good air quality. However, the Department does not believe that the NSR program provides the public with a mechanism to be more involved in improving air quality, since the public does not have the technical expertise to understand the projects.

Major NSR Permitting

A. Applicability

The Department rules contain a definition of "major stationary source" that is similar to the EPA definition of major stationary source except the Department excludes the emissions from vessel activities.

When assessing whether two or more non-contiguous facilities owned by the same company should be considered one source for applicability purposes, the Department does not have a specific set distance between the facilities, but evaluates the situation on a case-by-case basis. The Department does consider the facilities' financial, contractual, and personnel relationship with each other as well as the two-digit SIC codes of the facilities.

If the projected emissions are near the NSR thresholds, the Department requires stack testing to confirm emission rates.

Condensable particles are taken into account for NSR applicability purposes.

The Department has a definition of fugitive emissions that is consistent with the federal definition. Additionally, fugitive emissions could be used in a netting analysis for sources that must include fugitives in determining NSR applicability.

When evaluating proposed modifications, the Department ensures that any emissions from debottlenecking or increased utilization activities are included in the applicability analysis.

Although applicants do not commonly avoid PSD applicability via netting, it has been used and EPA believes that the Department has a good understanding of the process.

B. Prevention of Significant Deterioration (PSD) Permitting

The Department has only processed three PSD permit in the last six years. Despite the lack of extensive PSD permitting experience, the Department staff present during the evaluation interview were generally knowledgeable of PSD permitting requirements and should be able to handle future PSD permitting actions successfully. The Department creates an extensive Permit Application Evaluation document that provides all the details and assumptions of the Best Available Control Technology (BACT) evaluation as well as other information used to develop the draft permit.

EPA discussed in detail with the Department staff the concept that there is no such thing as an "insignificant" emissions unit in the PSD program. All emission units that emit a pollutant subject to PSD must go through a BACT analysis, regardless of the amount of emissions (e.g., less than five tons per year (TPY) of emissions). Additionally, EPA Region 4 is available to assist the Department with future PSD permit applications.

In general, the Department does not require the applicant to assess visibility impacts at locations near the proposed source modification (e.g., airports, parks) or assess impacts on vegetation for pollutants which do not have short-term ambient standards (e.g., 8-hour NO_x impacts) and will allow the assumption that NAAQS assure the protection of vegetation. However, the Department rules allow all the Technical Secretary discretion to require further assessments if the Department believes it is warranted or the public requests such an assessment.

C. Nonattainment Major NSR Permitting

Although the County has been designated nonattainment for the 8-hour ozone NAAQS, the Department has never issued a nonattainment NSR permit since this current designation became effective. However, the Department did respond to the nonattainment section of the NSR questionnaire and several topics were discussed in detail. The Department agreed to contact EPA in the event a nonattainment NSR permit application is received.

The Department has an emission offset banking program and one facility currently has banked emissions. The credits, which are tracked manually by an assigned permit engineer, have a life of five years and can only be used by the facility that banked them. The Department staff has a good understanding of the offset and banking requirements of the NSR program.

EPA discussed with the Department that, similar to the PSD program, there are no "insignificant emission units" in the nonattainment NSR program. All emission units that emit a pollutant subject to NSR must go through a Lowest Achievable Emission Rate (LAER) analysis, regardless of the amount of emissions. In addition, EPA Region 4 discussed the major differences in NSR applicability assessments and PSD applicability assessments (i.e., each nonattainment pollutant must be over the major source threshold in order to be subject to NSR permitting requirements).

NSR Avoidance

A. RMRR Exemption

The Department is aware of the procedures required for a routine maintenance, repair, and replacement (RMRR) exemption assessments and has made one formal RMRR assessment in recent history. EPA discussed the "purpose" evaluation factor with the Department staff and EPA's belief that a project is not eligible for the RMRR exemption if the project results in increased production capacity. The Department agreed to contact EPA in the event a request for another RMRR exemption is received.

B. PCP Exemption

On June 24, 2005, the U.S. Court of Appeals for the District of Columbia vacated the pollution control project (PCP) exemption rules and policies; consequently, the PCP exemption was not discussed in detail. The Department has not relied on any PCP exemptions when issuing synthetic minor NSR permits in the past.

C. Circumvention/Aggregation

The Department is aware of the possibility of NSR circumvention and watches for this circumstance during all their permitting actions. The Department has not found this to be a problem with the majority of their sources.

D. Synthetic Minor Permit Limits

The Department has approximately 100 synthetic minor sources; however, it is unknown how many of these are synthetic minor for PSD. All synthetic minor permits are tracked in the Department's database, but those with specific PSD avoidance or synthetic minor limits are not separately identified. EPA recommended to the Department that synthetic minor permits with PSD avoidance conditions be identified in the Department's database as well as on the application summary page of the permit evaluation document.

E. Relaxation

The Department has never encountered a situation where the relaxation provisions of the PSD regulations have been triggered. EPA discussed the basic concepts associated with relaxation assessments. It is EPA's understanding is that the Department identifies PSD avoidance conditions in some permits but not all. EPA suggests that the Department consistently identify any PSD avoidance conditions in their permits so that any modifications that may trigger relaxation in the future will be readily identifiable.

Minor Source Construction Permitting Program

In general, the Department's minor source permits are well written and contain practically enforceable permit conditions, however, the permits do not identify the requirements being avoided to keep the source minor (*e.g.*, PSD). Similar to all Tennessee permitting authorities, the Department rules require a BACT evaluation or LAER evaluation for minor source construction permits involving increases in emissions of volatile organic compounds (VOC). It is EPA's understanding that the Department interprets this provision to only require BACT/LAER evaluation at minor modifications at existing major sources. EPA believes the Department's implementation of this provision requires further discussions to ensure that it is being implemented in a manner consistent with TDEC's SIP. Finally, the minor source application process does not require modeling for minor sources.

[Note: Also see comment below on minor source modeling.]

Modeling

A. PSD Modeling

The Department does not require PSD permit applicants to prepare a modeling protocol prior to submitting modeling results and consequently cannot provide this protocol to EPA or other interested organization (*e.g.*, Federal Land Manager (FLM)). Because the Department does not process many PSD permit applications, this has not been a major problem in the past. However, EPA recommends that the Department require future PSD applicants to submit a modeling protocol and provide it to EPA Region 4 and FLM. This will allow EPA and the FLM to provide their modeling experience as a resource to the Department as well as allow all interested parties to agree ahead of time on the specifics of the modeling protocol to be used by the applicant. It is EPA's understanding that some of the sources will be submitting PSD permit application with modeling using the latest EPA recommended model (AERMOD) and training would be essential to the Department's review of this permit. EPA will contact the Department with further information on upcoming training.

The Department correctly uses allowable emissions as a basis for any cumulative impact modeling required during the PSD process. If necessary, the Department would request an inventory from TDEC if a PSD modeling analysis requires consideration of emissions sources located outside the County. The Department tracks actual emissions, allowable emissions, and the potential-to-emit (PTE) of all permitted sources in the county.

The Department's definition of ambient air differs from the federal definition, but is more stringent than EPA's definition (all portions of the atmosphere that is external to buildings). EPA discussed the difference and the Department understands that EPA only requires modeling receptors on that portion of the atmosphere external to building to which the general public has access (*i.e.*, beyond the fenceline).

Although the nearest class I area lies more than 100 miles outside of the county, the Department sends notice of all NSR projects to the closest FLM. The Department has never received comments from the FLM on any NSR permitting project.

B. Nonattainment Major NSR Modeling

[Note: Major nonattainment NSR modeling is not applicable in Shelby County at this time.]

C. Minor Source Modeling

The Department does not require minor source applicants to perform modeling to ensure that a violation of the NAAQS or PSD increment has not occurred. The Department maintains records of which minor source baseline dates have been triggered. Although modeling is not routinely performed for minor sources, the Department understands that minor source emissions can still cause or contribute to a violation of the NAAQS and that minor sources still consume PSD increment.

D. Increment Tracking

The Department does not formally track PSD increment consuming/expanding sources, however, they do track adequate emissions data for all major and minor emission sources such that an assessment of the PSD increment could be performed in the future, if necessary. The Department notes that emissions throughout the county have decreased substantially over time due to the closure of several older facilities.

Although not part of the NSR questionnaire, EPA discussed the Agency's current policies regarding the reactivation of existing "inactive" PSD sources. EPA will provide the Department with copies of the policy and guidance memoranda cited during this discussion for future use by the Department permitting staff.

Recommendations for the Department's implementation of the NSR program:

1. The Department should consider adding additional permit related information (draft permits, application review documents, etc.) to the Shelby County website to improve the public's access to information and encourage their participation in the permitting process.
2. The Department should identify the conditions in permits that are used to avoid NSR requirements. This will make potential future relaxation possibilities more identifiable and help preserve the history of the permitting decisions used to create the practically enforceable synthetic minor permit limits. Additionally, the Department should consider identifying synthetic minor NSR permits in both the application review document and the electronic permits database.

3. It is EPA's understanding that the Department only requires BACT or LAER on minor modifications with a PTE of five TPY for any nonattainment pollutant at existing major sources. However, TDEC and the other local permitting authorities in Tennessee implement this requirement by applying BACT or LAER on all minor source projects with a PTE of five TPY for any nonattainment pollutant. It appears that the Department is implementing this requirement in a manner less strict than TDEC's interpretation of the regulation. The Department should take steps to ensure that they implement this regulation at least as stringently as the manner in which TDEC is implementing the regulation.
4. EPA suggests that the Department seek additional training on the newest air models, such as AERMOD. It is EPA's understanding that some of the sources will be submitting PSD permit application with modeling using the latest model (AERMOD) and training would be essential to the Department's review of this permit. In addition, EPA will inform the Department of any modeling training in the future.

Conclusion

At the conclusion of the onsite portion of the Title V and NSR program reviews, Region 4 personnel met with Department officials to conduct an exit interview. During this exit interview Region 4 shared the findings of the review and laid out the next steps for completion of the final report. Personnel in attendance from EPA Region 4 were Randy Terry, Katy Forney, and Brandi Jenkins. Gregg Worley and Kay Prince of EPA Region 4 participated in the exit interview via telephone. Department officials in attendance included Bill Smith, David Thorpe, Bob Rogers, Bill Sprott, Gregg Fortunato, Jimmy Nguyen, Dee Dee McKimm, Albert Givens, Deborah Parrish, Lee Sherrill, Kelly Nelson, Mark Landry, and Jim Holt.

Overall, EPA believes that the Department is meeting the federal requirements of both the title V and NSR programs and looks forward to working with the Department in the future.

